



Telecommunications evolution and inequities of current tax policies: A case analysis for New Jersey

M. Hosein Fallah*

Wesley J. Howe School of Technology Management, Stevens Institute of Technology, Hoboken, NJ 07030, USA

Abstract

Telecommunications technologies, services and regulatory policies have been on a rapid spiral of evolution in recent years. However, state policies on taxation of telecommunications services and service providers and the systems of compensation of local governments for the use of public resources by cable television and telecommunications companies, have not kept pace with this rapid change. This paper examines the case of the State of New Jersey. It provides a baseline profile of revenues, taxes and user fees of telecommunications service providers for 1999 through 2005. The paper illustrates the effect of convergence and discusses the need for updating tax policies.

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1. Introduction

Telecommunications technologies, services and regulatory policies have been on a rapid spiral of evolution in recent years. However, state policies on taxation of telecommunications services and service providers, and the systems of compensation of local governments for the use of public resources by cable television and telecommunications companies have not kept pace with this rapid change. Initially perhaps, these differing treatments made economic and political sense.

*Tel.: +1 201 216 5018; fax: +1 201 216 5385.

E-mail address: hfallah@stevens.edu.

Initially, telecommunications services were demand inelastic, offered by different providers with no cross-utilization of infrastructure and technologies. Today, the evolution of technology has removed these boundaries. Any service provider can technically and legally provide many or all telecommunications and cable communications services. The substitutability of services and providers has added demand elasticity to markets and brought into question the rationale for differing tax treatments. The current uneven treatment of service providers for taxes, fees, and in-kind compensations violates the “*Equity and Fairness*” principle that similarly situated taxpayers should be taxed similarly (Gomperts, 2000; AICPA, 2001). It also distorts the cost picture for the services and the prices charged to consumers. Furthermore, it can affect the competitive availability of these services. For example, in New Jersey, local exchange carriers (LECs) and inter-exchange carriers (IXCs) are subject to corporate income tax and sales tax, but cable television providers (CATV) are exempt from these taxes. On the other hand, CATV providers are subject to a franchise fee for the use of public rights-of-way, but LECs and IXCs are exempt.

According to Eisenbach (1999), the system of taxation of telecommunications has not kept up with the evolution of the technology and the industry. A recent study by the National Governors’ Association (Palladino & Mazer, 2000) highlights the issues facing telecommunications service providers as well as the states:

“The current tax structure for the telecommunications industry is complicated by the myriad taxes and numerous government entities that apply them. According to the Committee on State Taxation, a nationwide provider of telecommunication services must file more than 55,000 tax returns annually. The complexity of the current system poses an administrative burden on telecommunications providers, especially new market entrants. ...State policymakers should undertake a thorough review of their telecommunications tax structure, using the fundamental principles of tax efficiency, competitive neutrality, tax equity, and administrative simplicity to guide their work.”

A number of states, such as Florida, Texas, and Vermont, have begun to examine the problem and reform their telecommunications tax structure. This paper examines the situation in New Jersey (NJ) and provides a baseline profile for moving the reform process forward.

The rest of the paper is organized as follows: Section 2 documents the current telecommunications tax and fee structure in NJ and the supporting statutes and regulations. Section 3 presents profiles of revenues generated and the corresponding taxes, and fees levied against the telecommunication service providers for 1995–2005. Section 4 discusses the rationale for reforming the telecommunications tax and fee structure. Section 5 explores the options for NJ going forward. Finally Section 6 provides a summary and the conclusions of the study.

2. Telecommunications taxes and fees in New Jersey

2.1. Taxes and fees

Taxes support government activities. They are borne “equally” by all citizens who fall within a target class, allowing for ability to pay versus priority of need. General revenue taxes are levied by state or local governments. Specific purpose taxes are levied to meet some industry need, such as

subsidizing industry expansion, leveling competitive opportunities, or discouraging the use of certain products, such as alcohol or tobacco. Among widely used taxes are income tax, sales tax, real estate tax and personal property tax.

Fees are also levied by government to generate revenue, but they are fundamentally different from taxes. User fees (or rent) are levied by government for the use of public goods or services. A user fee is different from a tax in the following ways:

“(1) a user fee is designed to defray the costs of a regulatory activity (or government service), while a tax is designed to raise general revenue; (2) a true user fee must be proportionate to the necessary costs of the service, whereas a tax may not be; and (3) a user fee is voluntary whereas a tax is not (Reed, 1999).”

Franchise fees (or license fees) are efficient mechanisms for “allocating scarce resources”. Resources have market value and proper pricing assures allocation to those who can make the best use and provide the highest value. For example, the Federal Communications Commission (FCC) offers licenses for the use of the electromagnetic spectrum to wireless communications service providers through an auction process. The auction price is an example of a franchise fee and the auction process is a competitive mechanism for allocating the scarce resource. A license is normally granted to the highest bidder. Similarly, local governments can charge a CATV provider a franchise fee for the privilege of providing service in the franchised area. Local governments can also charge utility companies an annual fee (user fee or rent) for use of the public right-of-way. The right-of-way fee may also include compensation for repair of roads and streets that are periodically dug out by those companies for maintenance and expansion of their services.

Application of these types of levies in an industry that has been going through rapid evolution has created complexity and inequities for service providers as discussed in the following sections.

2.2. *Current structure of telecommunications taxes and fees in NJ*

Telecommunications companies have four distinct, though often confused, responsibilities that form financial obligations to the state and local governments. Firstly, as corporate citizens, they have a citizen’s obligation to pay a fair share of the financial burdens of the state and local government. Secondly, telecommunications services are often the vehicles for collecting general excise taxes imposed on the users of the services. Thirdly, many but not all telecommunications companies request and receive privileged use of public property, in the form of state and local public rights-of-way and utility easements. Fourthly, companies that enjoy privileged status and special use of public property can appropriately be asked to address particular community needs and interests through in-kind contributions of facilities and services. Application of these obligations over time, with the evolution of telecommunications services and passage of the Telecommunications Act of 1996 (US Code, 1996), has resulted in an uneven financial burden on different service providers in New Jersey, as well as in other states. Table 1 lists the type of obligations by telecommunications service providers in New Jersey.

Historically, telephone companies, as public utilities, have been granted right-of-way on public roads and streets for their cables, wires and telephone poles without having to compensate local municipalities for such use. The Bell System in early 1900, promoted telephony as a “Universal Service” that was necessary for the public good (Hochheiser, 2002). Free access to public right-of-

Table 1
Applicable taxes and fees by type of service

Type of tax	LEC	LD	Cellular	CATV	DBS	Internet
Corporation business tax	Y	Y	Y	N	N	N
Sales and use tax (on service)	Y	Y	Y	N	N	N
Local real property tax	Y	Y	Y	Y	Y	Y
Local personal property tax	Y	N	N	N	N	N
CATV franchise fee	N	N	N	Y	N	N
In-kind service obligations	US	US	US	Y	US	US
Board of public utilities annual assessment (user fee)	Y	Y	N	Y	N	N

LEC = local exchange carrier, LD = long distance, DBS = direct broad-casting systems US = unspecified.

way was a reasonable consideration to accelerate penetration of telephone service. Hence, the New Jersey Statute (NJ–statute 54:30A-124) prohibits municipalities from imposing any taxes or fees on telecommunication companies.

CATV was treated differently. For a long time it was not considered as a communications service. The US Congress passed a comprehensive Cable Communications Act in 1984, establishing rules for franchising and regulation of CATV services (US Code, 1984). The Cable Communications Act was amended in 1992 to provide for greater competition and to impose new regulations on the cable television industry with regard to its competitors and consumers (US Code, 1992). The 1992 Act allows the local and/or state authorities to regulate any areas that the FCC did not preempt. The franchising authority is allowed to charge the cable operator a fee for the right to operate a cable system in that franchise area, but the fee cannot be more than 5% of its annual gross revenues (US Code, 1984). The law prohibits local governments from imposing any other taxes or fees on the CTV services or service providers. Many states have used this provision to establish and collect CATV franchise fees. In New Jersey, the franchise fee is established at 2% of the annual gross revenues from “basic cable service.” Municipalities, as local authorities, enter into franchise agreements with CATV service providers, subject to the state’s approval. The franchise fee is paid to the municipality granting the consent, in place of all other franchise fees, taxes and municipal license fees (NJ-Statute 48:5A-30). This franchise fee is a major source of revenue for many New Jersey municipalities.

There are no set rules on in-kind obligations except for CATV providers. They are obligated by the 1984 Act to provide local programming channels and support the local communities. Many of the telecommunications companies, however, do provide some form of in-kind support to their local communities. For example, Verizon Corporation has a program called Access New Jersey that helps implement broadband networks in schools and public libraries at substantial discounts. The extent of in-kind support varies from company to company and across services. The Telecommunications Act of 1996 (US Code, 1996) exempted direct-to-home satellite television service providers (DBS) from any taxes by local governments. The rationale behind the exemption was to relieve a developing industry from administrative burden of collecting and remitting taxes in literally thousands of local jurisdictions. The focus instead was on improving a new technology and expanding the industry. Hence, these service providers do not pay any sales or franchise taxes in NJ.

2.3. New Jersey telecommunications taxes

At the state level, taxes levied on telecommunications services and service providers include:

- *Corporate business tax*—Telecommunications as public utilities are subject to a public utility tax that must be paid annually (NJ-Statute 54:10A-5.25). The current tax rate is set at 9% on net income.
- *State sales tax*—6% sales tax is imposed on receipts from every sale in New Jersey, except for resale, of intrastate or interstate telecommunications services (NJ-Statute 54:32B-3).
- *Property tax*—all properties, real and personal, within the jurisdiction of the state are subject to taxation annually. LEC's properties, such as equipment and facilities are excluded from this tax (NJ-Statute 54:4-1).

Internet service providers and sales transactions on the Internet are exempt from taxes by state and local government. The Internet Tax Freedom Act (US Code, 1998) passed by Congress was intended to allow continued growth and expansion of Internet and electronic commerce unabated until the states and federal government develop an appropriate model for taxing sales transactions over the Internet. In the meantime, states and local governments are losing substantial tax revenues as more sales migrate from local businesses to Internet.

Table 2 lists the tax and fee rates currently imposed on telecommunications companies in New Jersey.

3. Baseline profile

This section presents baseline data on revenues and corresponding taxes and fees paid by the telecommunications service providers in New Jersey, for the years 1995 through 1999, and extrapolated through 2005. Assembling the baseline was a difficult task, since all the required data did not exist in any one organization or in the form needed for this analysis. The service-level revenues for local exchange and CATV are actual data reported by the service providers to the New Jersey Board of Public Utilities (NJBPU). The long distance revenues are derived from the FCC's reports. The wireless, DBS, and Internet revenues are derived from multiple sources at

Table 2
Applicable tax and fee rates for telecom companies in NJ

Type of tax	LEC	LD	Cellular	CATV	DBS	Internet
Corporation tax	9%	9%	9%	—	—	—
Sales tax	6%	6%	6%	—	—	—
Property tax	2.54%	2.54%	2.54%	2.54%	2.54%	2.54%
Personal property tax	2.54%	—	—	—	—	—
CATV franchise fee	—	—	—	2% ^a	—	—
Board of public utilities annual assessment	~0.15%	~0.15%	—	~0.25%	—	—

Source: New Jersey Board of Public Utilities.

^aApplied to gross revenues from basic service.

national and state levels. Appendix A details the sources of data and the method used to derive these profiles.

Fig. 1 shows the revenue profile by type of service for 1995 through 2005. The total revenue grew from \$8.2B in 1995 to \$11.5B in 1999 with an average annual growth rate of 8.9%. In traditional services, local exchange revenue grew at about 14% per year. The high growth rate of local exchange revenue was partly due to the rapid explosion of the Internet in the 1990s, and the need for extra lines for dial-up users. The intra-state toll revenue declined at about 4.5% per year. The decline is attributable to the growth of wireless. Cellular plans in the state provide much wider free calling areas than the defined free calling areas for local exchange service. Hence more intra-state toll calls are moving to wireless. Compared to local exchange revenue, the interstate toll revenue grew at a lower rate of about 6.6%. Again, some of this long distance revenue has been shifting to regional and national cellular plans. As one can expect, wireless revenue has been growing at about 16% per year, much faster than revenue from other services. This growth is occurring despite the rapid drop in average per minute charge for wireless plans. The extension of the profile to 2005 was arrived at by applying the baseline average growth rate of each service to that service for the years 2000–2005. The shift from conventional services to wireless and broadband seems to have been faster after the year 2000 compared to the baseline period. This study was undertaken in 2001. At the time, there were no specific data to support growth rates higher than the baseline growth rates. Hence, extrapolating the baseline profiles was a good approximation to focus the New Jersey legislators' attention on the growing inequities of the state telecommunications tax system.

The distinction between intrastate and interstate tolls is artificial and results from the 1982 consent decree that broke up the Bell System. With the deregulation of intrastate toll, the distinction is disappearing. Fig. 2 shows the baseline profile with intrastate and interstate toll revenues combined into one category, long distance.

Fig. 3 highlights the shift in revenues from traditional telecommunications services to new services. The actual shift since 1999 could be significantly larger than illustrated in the profile due

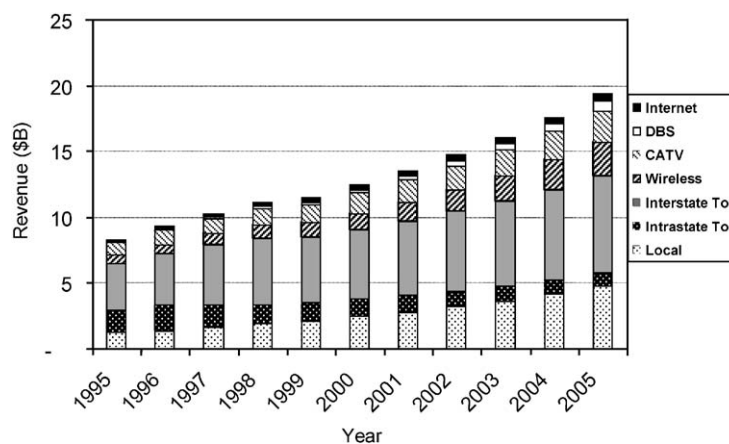


Fig. 1. New Jersey total telecom revenue by service (the height of each bar represents the total revenue in billion dollars generated from all telecommunications services for the particular year. The first layer at the bottom is the revenue from the local exchange service. The next layer is the corresponding revenue from interstate toll, and so on).

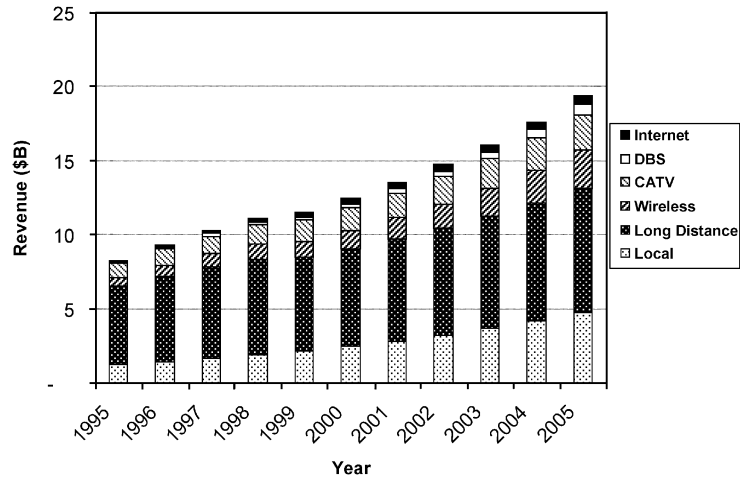


Fig. 2. New Jersey total telecom revenue by service (combined interstate and intrastate toll).

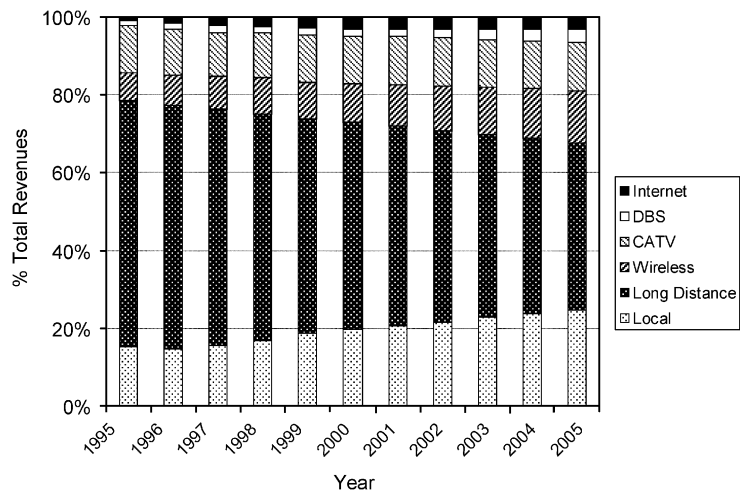


Fig. 3. Distribution of telecom revenues by service (in this chart the height of each bar correspond to the 100% of the annual revenue from all telecommunications services for the particular year. The height of each layer then represents the percentage of the total revenue generated by the particular service. For example in 1995, the local exchange revenue was 15.2% of the total revenue; local and long distance together constituted 78.6% of the total. In 2005, the share of these two services drops to less than 70% of the total annual revenue).

to two factors: (1) Cellular calling plans with regional and national free long distance have become more affordable and widespread, accelerating the shift from traditional long distance to wireless; and (2) Internet users are increasingly demanding high speed connections, switching from dial-ups to cable modems and digital subscriber lines (DSL), dampening the growth of local exchange services.

Figs. 4 through 7 present different views of the taxes and fees based on the above revenue profile. In developing these profiles, real estate and personal property taxes, as well as the value of

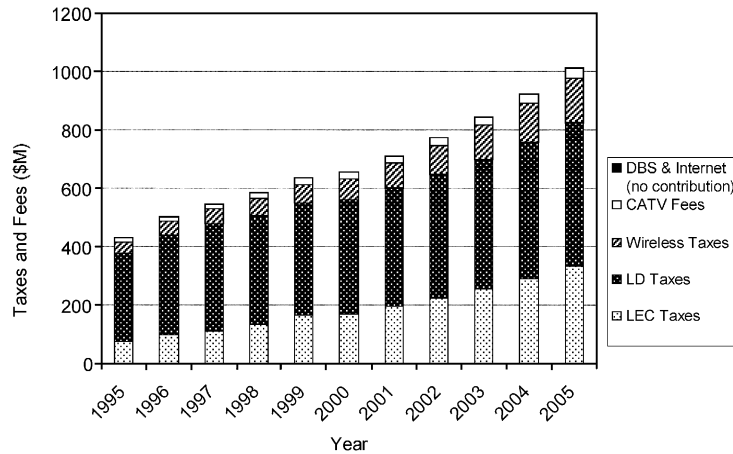


Fig. 4. New Jersey telecom paid taxes and fees (the height of each bar represents the total of taxes and fees in million dollars paid by all communications service providers for the particular year. The height of each layer is the contribution to this total from the particular service. Notice that DBS and Internet services have no contributions).

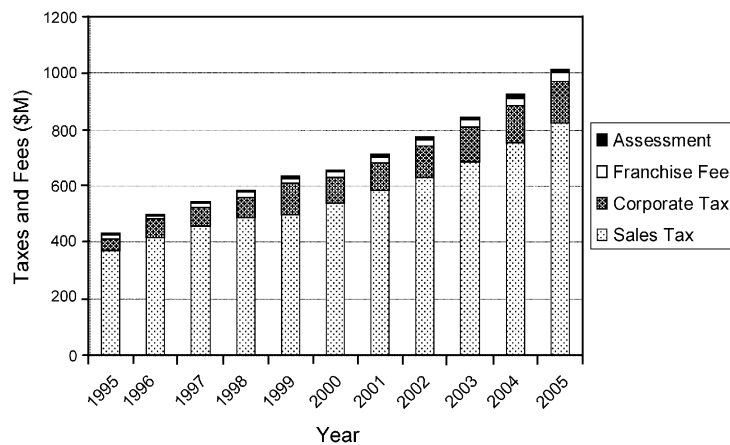


Fig. 5. Telecommunications taxes and fees by tax category (this chart represents the same profile of the total of taxes and fees as in Fig. 4, but organized by type of the levy. For example, for the first layer in 1995, the state collected \$371 M in sales tax from local exchange, long distance and wireless services together. The rest of the bar represents corporate business taxes, franchise fees and user fees, adding up to a total levy of \$430 M for 1995, and so on).

any in-kind contributions to local and state entities, are not considered. These taxes and contributions are not reported to a single government entity. Thus, there is no easy way to access this level of information statewide. Also, in relative magnitudes they are not significant.

The baseline tax profile is presented in Fig. 4. The extrapolated values for the years 2000 through 2005 were derived by applying the tax and fee rates from Table 2 to the estimated revenue for each type of service from Fig. 1.

Fig. 5 presents the telecom taxes and fees by category of tax (or fee). This figure shows sales taxes constitute the majority of dollars collected annually. Since CATV, DBS and ISP companies

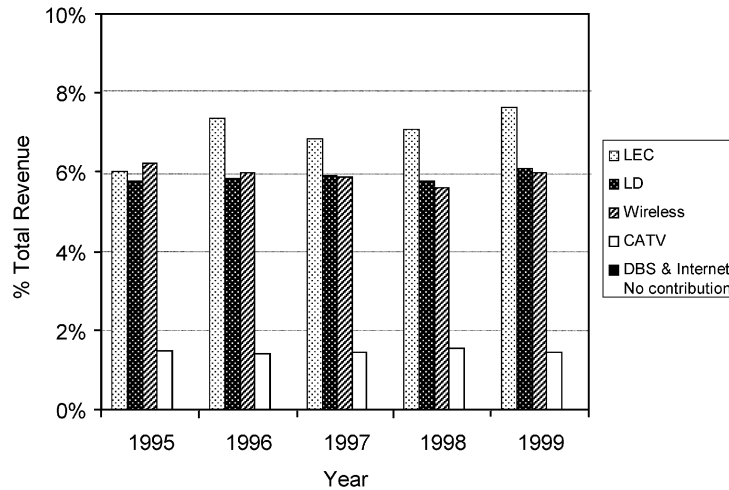


Fig. 6. Telecom taxes and fees as % of service provider revenues.

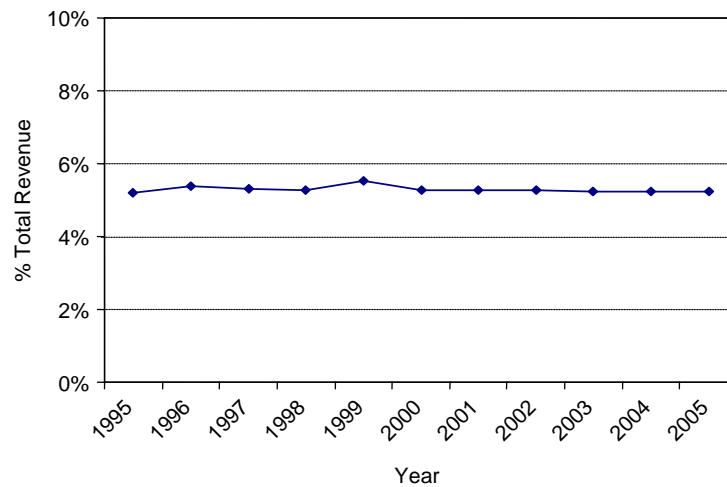


Fig. 7. Telecom taxes and fees as average % of total revenue.

do not pay sales tax, it is clear that most of the tax burden is carried by wireless and wireline telecom services. As more users and services move to broadband networks on CATV and DBS, the state revenue from sales tax on traditional telecom services will decline.

This inequity in tax burden is further highlighted in Fig. 6. The figure shows the tax burden as a percentage of the service providers' gross revenue. Local exchange provides the highest contribution, DBS and Internet provide nothing.

Fig. 7 shows the total of telecommunications taxes and fees as an average percent of the gross revenues of all telecommunications services. This rate has been varying between 5% and 6% with a mean value of 5.25%. It can be expected that the average percentage will decline as more of the

telecom revenues shift from higher tax services to lower tax (CATV) or no tax (DBS and Internet) services, unless the system of taxation is revised to level the tax burden.

4. Rationale for reform

From the baseline data presented in the previous section one can make the following observations:

1. There are major anomalies in financial obligations to the state. CATV, DBS, and Internet service providers do not pay state corporate tax on their income, and do not collect sales tax. On the other hand, only CATV providers pay franchise fees. There is no longer any rationale for these differing treatments, since these services are converging and can be supplied by the same providers.
2. Aside from the different treatments, service providers do not equitably share the tax burden. The rate of contribution varies significantly across the board from no contribution in the case of Internet and DBS providers to about 7% of revenues for the LECs.
3. There is a shift of revenue from traditional telecommunications services, i.e. local and long distance, to more “advanced services” such as wireless, cable and DSL. This shift will continue and intensify over the next decade, further distorting the picture on equitable financial obligations to the state. This shift could also lead to shortfalls in state tax revenues from telecommunications services since the advanced services make less or no contribution to the state tax revenue.
4. The convergence of telecommunications technologies and the regulatory reform have blurred the distinctions among the service providers as each can legally and technologically provide all of the services. Even ISPs that currently provide Internet connections can provide Internet telephony and other communications services. Hence the time is right for simplification, which will result in more fairness and transparency of the tax system for the services and providers.

In the context of the basic principles underlying financial obligations of corporations to the state and local governments, these observations suggest a need for reforming the current tax and fee structures for telecommunications. However, any restructuring of the taxes and fees should assure:

1. *Competitive neutrality*—avoiding any tax and fee mechanisms that would bias the competitive equation among service providers
2. *Appropriate pricing for public goods*—most of these services use the public right-of-way in reaching their customers. With the deregulation of telecommunications, more service providers need and demand access to these rights-of-way. A re-examination of the system of compensation to municipalities for the use and maintenance of the public rights-of-way is necessary to ensure that the shift in telecommunications technologies and growth of competition do not adversely affect compensation to municipalities for these public resources, and competitive neutrality to the service providers.

3. *Tax efficiency*—avoiding distortion of economic decision-making and resource allocation. Inefficient tax levies could drive companies to make investment and pricing decisions geared more toward local optimization than global optimization of their businesses. For example, the franchise fee on CATV providers applies to the gross revenues from the basic service. The companies have no incentive to expand and improve what is considered basic service, which every subscriber must have. Instead, they have been bundling more of their services in packages under advanced services that are not regulated and thus are not subject to the franchise fee.
4. *Simplicity*—reducing administrative complexity and cost.

5. Leveling the tax burden

The baseline analysis of the current tax and fee structure for telecommunications in New Jersey shows a distorted picture of what should be a fair contribution to the state and local government financial obligations. The inequities could also affect the competitiveness of the market. Several studies suggest simplifying and leveling taxes for telecommunications services. In particular, Palladino and Mazer (2000) recommend:

“States need to examine the patchwork of local taxes and fees imposed on telecommunications firms. Most states grant the authority to impose these taxes and fees by statute, and, therefore, states can make any necessary changes. One step states can take is to consolidate the number of fees and taxes imposed, possibly collapsing them into one local fee to cover all expenses incurred by local governments to manage rights-of-way. This could be done so local revenue is maintained while simplifying fee administration.”

Also, in November 1999, a consortium of telecommunications service providers presented a proposal for (“State and Local Taxation of the Telecommunications Industry”), to the Advisory Commission on Electronic Commerce.¹ The proposal offered an option for simplification of state and local telecommunications taxes by incorporating a single, statewide transaction tax on telecommunications, a portion of which could, at the state’s option, be distributed to local governments.²

Reforming the system of taxes and fees will enable the state and the local governments to apply an appropriate pricing to the use of public rights-of-way. The average of excise taxes and fees in NJ is currently about 5.25%. To compensate municipalities adequately for the use of public rights-of-way, the single tax rate may need to be around 5.5% to 6%, in order to keep the current state revenue neutral.

While a single tax rate for all telecommunication services is attractive from the perspectives discussed earlier, further studies are necessary to establish an adequate level of compensation to local governments for the use of their rights-of-way, as well as to evaluate the impact of a leveled tax rate on the growth of advanced services in the state.

¹The Advisory Commission on Electronic Commerce was created by Congress in 1998 to study the impact of taxes on transactions using the Internet and Internet access.

²Consortium consisted of: AirTouch, ALLTEL, AT&T, Bell Atlantic, BellSouth, CommNet Cellular, Global Crossing, GTE, SBC, Sprint, U S WEST, and Western Wireless.

6. Conclusions

Over the past decade, the system of taxation of telecommunications services and service providers has not kept pace with the rapid evolution of telecommunications technologies, services and regulatory policies. This paper examined this anomaly for the State of New Jersey. The paper highlighted the inequities in the current system of taxation, and suggested leveling the tax burden and simplifying the process. The observations in this paper typify the problems facing policy makers across the United States. Some states have begun to address the problem. One of the difficulties in reforming the current tax and fee system is balancing promotion of advanced technologies versus policies to maintain competitive neutrality, fairness to taxpayers on charges for the use of communications services, and fiscally sound requirements on communications companies to pay a fair share of the state's tax burden. Of course this difficulty is no justification for continuing the current complex, unfair and out-dated system.

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Appendix A. Data sources and method of deriving baseline profile

A.1. Revenues

Telecommunications and cable communications services are partly regulated and partly unregulated. No single government organization had all the data needed to create the baseline. The author used the following data sources to assemble the baseline:

1. NJBPU:³
 - Total annual revenues for local exchange and regional toll combined, for years 1995–1999.
 - Basic service revenues and total revenues for CATV services, for years 1995–1999.
2. FCC Reports:
 - NJ total telecommunications revenue for 1999.⁴
 - NJ wireless revenues based on the state proportion of national subscribers for years 1995–1999.⁵
3. KPMG study conducted for Verizon Corporation:⁶

³Correspondence with NJ BPU, July 2001.

⁴State-by-State Telephone Revenues and Universal Service Data, April 2001.

⁵FCC 01-192, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, July 17, 2001.

⁶KPMG Market Forecast 98-04 for New Jersey.

- Reported local exchange revenues for 1995 and 1996.
 - DBS revenue for 1995–1999.
4. US Census Bureau:⁷
- NJ and US population to apportion National Internet Revenue.

The baseline profiles were created as follows:

- a. Local exchange revenues—actual for 1995, 1996, and 1999; interpolated data for 1997 and 1998.
- b. Regional toll revenues (intrastate toll)—subtracting local exchange revenues (above) from the reported NJBPU data.
- c. Wireless revenues—FCC-reported national data proportioned by subscribers in NJ.
- d. Interstate toll revenues—subtracting NJBPU data and wireless revenues from the total NJ revenues provided in the FCC report.
- e. CATV revenues—basic service and total revenues from NJBPU.
- f. DBS revenues—from KPMG study.
- g. Internet revenues—estimated from the US revenues based on population.
- h. The revenues for the years 2000–2005 were extrapolated from the baseline using the average growth rate of the baseline for each service.

Taxes and fees

The CATV franchise fees were reported by NJBPU. The annual sales and corporate business taxes for telecommunications services for the years 1995–1999 were provided by the NJ Department of Treasury.⁸ However, there was no way to obtain actual tax data at the service level without the full cooperation of the service providers, which was not possible. Hence, the profiles were estimated as follows:

- The sales taxes for local exchange, long distance and wireless were calculated by applying 6% (Table 2) to the baseline revenues. After comparing the total annual sales taxes with the total from the Department of Treasury, the baseline sales taxes were adjusted downward by 14%, proportionally, to account for the portion of revenues produced from services provided to the state and local governments. These services are not subject to sales tax because the net effect of a sales tax on the government cash flow would be zero. On the state income such tax will have no real contribution.
- For corporate business tax, the tax rate of 9% applies to the net income. To estimate the net income from the gross revenues, the author used the annual reports of the key service providers in NJ (AT&T, Sprint, and Verizon), and averaged the ratio of their net income to their gross revenues. This ratio was multiplied by the gross revenues and then multiplied by the state tax rate to derive estimates of the corporate business taxes from the revenue profile. These tax estimates were then compared with the data from the Treasury Department. The tax estimates

⁷Census 2000, Data for the State of New Jersey.

⁸Correspondence with NJ Department of Treasury, August 2001.

were accordingly adjusted for each service. Through this adjustment, the baseline tax profiles are closer to the reported data, although they cannot be validated without the actual data from the service providers.

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